ELSEVIER

CLINICAL BIOMECHANICS

AUTHOR INDEX

Adam C, 1
Aebi M, 495
Aleksiev A, 386
Alfke D, 62
Alton F, 434
An K-N, 54, 365
Ankrum DR, 584
Antoniou J, 495
Arndt AN, 532
Arwert HJ, 593
Ashman RB, 441
Aymard C, 18

Babat LB, 11, 239
Baldey L, 434
Baramki HG, 495
Barrett CJ, 574
Baunin C, 473
Becker C, 1
Bedoiseau M, 18
Belda JM, 216
Bendjaballah MZ, 625
Benedetti MG, 204
Bini S, 608
Birch JG, 441
Bogduk N, 377
Bolte KM, 386
Bray RC, 314
Bronson DG, 441
Browne RH, 441
Brüggemann G-P, 532
Burgess-Limerick R, 584
Burnett AF, 574
Burnham RS, 234

Cahuzac JP, 473
Campbell R, 374
Caplan S, 434
Catani F, 204
Chan M, 234
Chang G-L, 230
Chen I-H, 48
Cheng C-K, 548, 634
Cholewicki J, 11, 239
Christensen H, 272
Chuinard CR, 163
Claes L, 359
Cornwall MW, 190
Coutts FJ, 452
Crisco III JJ, 112
Cristofolini L, 608

Dalstra M, 351
Davidson PL, 414
Davis KG, 141
Day RE, 574
de Groot JH, 280, 593
Delisle A, 506
Dennis DA, 455
Desjardins P, 506
Detrembleur C, 77, 83
Ding M, 351
Dodd KJ, 371
Drape J-L, 18
Duda G, 359
Dumas GA, 293
Dvorak J, 11, 112, 239

Eckstein F, 1
Elliott BC, 574
Espinoza LM, 163
Estivalèzes E, 473
Evans M, 603

Feipel V, 128
Feldman AG, 121
Fink A, 374
Finsen L, 272
Frank J, 561

Gabriel SM, 455
Gagnon D, 36
Gagnon M, 506
Gardner TN, 603
Gervais PL, 234
Giannini S, 204
Gilchrist LA, 91
Goel VK, 386
Goldie PA, 371
Gracovetsky SA, 121
Grant CD, 371
Grauer J, 11
Grauer JN, 239
Grimby G, 336, 344
Grootenboer HJ, 256

Haas F, 359
Hamel AJ, 420
Han SM, 480
Hang Y-S, 48, 634
Hardy J, 603
Harfe DT, 163
Harnroongroj T, 449
Haslock I, 374
Hatzitaki V, 182
Hermens HJ, 27
Herzog W, 314
Hobatho MC, 394, 473
Hoff WA, 455
Hong WH, 176
Hooper DM, 386
Hoshizaki TB, 182
Hsu S-H, 48, 634
Huijing PA, 256
Hutten MMR, 27
Hvid I, 351

Imran A, 153
Isakov E, 515
Itoi E, 54

Janousek A, 359
Jennings AG, 138
Johnson G, 377
Johnson GR, 542

Kao H-C, 548
Kappel-Bargas A, 190
Karlsson D, 71
Kenwright J, 603
Kerr M, 561
Kitaoka HB, 365
Komi PV, 532
Komistek RD, 455
Koopman HFJM, 256
Kura H, 365

Lafuente R, 216
Lai KA, 176
Lanzi D, 77, 83
Larivière C, 36
Leardini A, 204
Lee TQ, 616
Lilley JC, 616
Limbert G, 473
Lin R-M, 230
Linde F, 351
Liu C-L, 548
Lo W-H, 548
Loomer RL, 414
Low CK, 485
Low YP, 485
Lukkariniemi J, 532
Luo Z-P, 365
Lydon C, 112

Mabuchi K, 250, 492
Malone LA, 234
Manal K, 195
Marras WS, 141, 261
Marshall RN, 574
McClay I, 195
McPoil TG, 190
Meskers CGM, 280
Miller L, 234
Milz S, 1
Mitnitski AB, 121
Mizrahi J, 515
Moe-Nilssen R, 320, 328
Morrey BF, 54
Morris ME, 371
Morrissey MC, 434, 452
Motzkin NE, 54
Muller MTH, 27

Neptune RR, 521
Neumann P, 561
Newman NM, 121
Ng RTH, 485
Nibu K, 11, 239
Nigg BM, 521
Norman R, 561

O'Connor JJ, 153
Österberg U, 336, 344
OUBPS Group, 561

Pandy MG, 98, 403
Panjabi MM, 11, 112, 239
Parnianpour M, 261
Peacock JC, 542
Peeters M, 336
Pereira BP, 485
Périé D, 394
Pfeil J, 359
Pignotti E, 204
Plooy A, 584
Pölzl K-H, 308
Pope M, 386
Powers CM, 616
Prat J, 216
Putz R, 1

Ritschl P, 308
Rome K, 374
Rooze M, 128
Rozing PM, 280
Rubin R, 495

Salvia P, 128
Samchukov ML, 441
Sánchez-Lacuesta J, 216
Sanderson DJ, 414
Sasada T, 250, 492
Savory KM, 62
Schulte E, 1
Seedhom BB, 138
Shannon H, 561
Sharkey NA, 420
Shelburne KB, 98, 403
Shirazi-Adl A, 625
Soler C, 216
Solomonow M, 163
Sommerich CM, 261
Spalding D, 377
Spratt K, 386
Steadward RD, 234
Steffen T, 495
Stukenborg C, 62
Su FC, 176
Sun J-S, 48, 634
Suter E, 314
Svantesson U, 336, 344
Sykes N, 542
Szarzanowicz TE, 480

Takahashi H, 344
Tesio L, 77, 83
Thomas KA, 163
Thomeé R, 336
Thornton MJ, 452
Thoumie P, 18
Toni A, 608
Tranberg R, 71
Trattnig S, 308
Tsao K-Y, 48, 634
Tseng W-C, 230
Tsuang Y-H, 48, 634

Ujihira M, 250, 492

Valstar ER, 593
van den Bogert AJ, 521
van der Helm FCT, 280
van der Linden BJJJ, 256
Veith W, 359
Verbitsky O, 515

Vermeulen HM, 280
Voloshin AS, 515

Walker SA, 455
Walter J, 308
Wang C-L, 230
Wang M, 293
Wang S-T, 548
Waters TR, 141
Wei K-Y, 48
Wells R, 561
Wolf S, 359
Wong HP, 485
Woolf RD, 190
Wright IC, 521
Wrigley TV, 371
Wu G, 300
Wülker N, 62

Yahia LH, 121
Yu C-Y, 230

Zembsch A, 308
Ziv I, 480
Zukor DJ, 625

PII: S0268-0033(98)00082-5

ELSEVIER

CLINICAL BIOMECHANICS

SUBJECT INDEX

3-D kinematics, 272, 280

acceleration, 515
accelerometry, 320, 328
achilles tendon, 532
ACL-deficient knee, 98, 153
ACL loading, 403
age, 351
agility, 91
aging, 300
alar ligament, 112
amputation, 83
animal joint, 250, 492
ankle biomechanics, 62
ankle complex, 71
ankle joint moments, 532
ankle, 365
anterior cruciate ligament injury, 138
anterior knee pain syndrome, 314
arthrodeses, 62
arthroplasty, 608
arthroscopic knee surgery, 314
arthroscopy, 1
articular cartilage, 1, 351, 492
artificial knee implants, 455
artificial neural networks, 216
asymmetry, 36
auto assembly, 561

balance, 91, 320, 328
biomechanical spine model, 561
biomechanical testing, 449
biomechanics, 1, 11, 36, 71, 112, 128, 176, 216, 230, 239, 261, 365, 377, 386, 441, 485, 625
biotribology, 492
bone fragment fixation, 441
bone mineral density, 480
bone shortening, 485
bone strength, 480

cadaver study, 485
cadaver, 420
calcaneal fractures, 230
calcaneocuboid, 62
calcium-depleted diet, 480
calf muscle, 344
camera angle, 452
camera placement, 452
capsule, 54
capsuloligamentous structures, 54
carpal tunnel pressure, 261
cartilage thickness, 1
central rod system, 548
centre of gravity, 77, 83
cerclage wire, 449
cervical spine, 11, 239
chair rise, 176
child tibial abnormalities, 473
coactivity, 141
combined testing, 351
compression, 561
computer models, 1
conformity, 250
consistency, 27
contact area, 394
contact element, 394
coordination of motion, 121
Cotrel–Dubousset instrumentation, 548
creep, 492
cricket, 574
critical load, 11
cyclic stretch, 48

decision-making support systems, 216
degeneration, 495
dentistry, 272
derotation, 548
diagnosis, 308, 1
displacement, 603
dorsal angulation, 485
drawer forces, 625
dynamic posture, 300
dynamometry, 27

elderly, 91
electrogoniometer, 18
electromyography, 272, 336
EMG-assisted model, 141
enhancement, 359
epidemiology, 561
ergonomics, 77, 261
examination conditions, 308
external circular fixation, 441
external fixator, 603

fast bowling, 574
fatigue, 344, 515
femorotibial joint, 394
femur, 608
finite element analysis, 625
finite element model, 473
finite element modelling, 394
first twist, 449
fluoroscopy, 455
foot and ankle, 420
foot, 71, 190, 365
footwear, 521
force control deficit, 182
force–length relationship, 256, 532
fracture healing, 359
fracture malunion, 485
fracture stability, 449
fracture, 603
friction, 250
functional movement phases, 182

gait analysis, 71, 204, 216, 320, 328
gait, 371, 420
glenohumeral joint, 54
gonarthrosis, 414
ground reaction force, 420

hamstrings co-contraction, 153
head and neck, 584
heel pad thickness, 374
heel pad, 374
heel pain, 374
heel strike, 515
helical axis, 62
hemiplegia, 371
high extension rate, 112
homogenised mechanical characteristics, 473
human locomotion, 320, 328
human tibia, 351

ilizarov, 441
impact, 521
in vitro modeling, 616
in vivo force, 532
injury mechanism, 239
injury, 574
interactive graphics, 455
interfragmentary movement, 359
internal fixation, 230
interpolated twitch technique, 314
intradiscal pressure, 495
isokinetic muscle actions, 336
isokinetic velocity, 141

joint contact, 365
joint dynamic analysis, 182
joint moment, 176
joint, 365

keyboard, 261
kinematic MRI, 308
kinematics, 414, 420, 434, 455
kinemetrix, 452
kinesiology, 190
kinetics, 420
knee bracing, 414
knee-joint, 1, 625
knee, 163
knee-joint modeling, 403

L5/S1 joint, 36
lateral collateral ligament, 163
latissimu dorsi, 377
lifting, 36, 386
ligament function, 98
ligaments, 54, 128
linked segment model, 36, 272
load transmission, 625
Local–Lock-technique, I, 308
locomotion, 371
lordosis, 121
low back pain, 386, 561
low back, 27
low effort, 27
lower limb, 83
lowering, 141
lubrication, 250
lumbar spine, 18, 377, 386, 495, 574
lumbar support, 18

macrofailure, 634
manual materials handling, 36
massive prosthesis, 608
maximum effort, 27
mean power frequency, 336, 344
mechanical properties, 351, 473
mechanical stability, 11

mechanical stress, 495
mechanical testing, 293
medial collateral ligament, 163
medial longitudinal arch, 190
median nerve, 234
micro-failure, 634
model based object recognition, 455
modeling, 377
motion analysis accuracy, 452
motion analysis, 18
motion, 593
motor control, 320, 328
movement analysis, 216
movement strategy, 300
multi-joint movement, 182
muscle–tendon unit, 48
muscle forces, 616
muscle geometry, 256
muscle inhibition, 314
muscle stiffness, 138
muscle stimulation, 314
muscles, 377
musculoskeletal model, 98
musculoskeletal modelling, 521

non-uniform stress, 532

obstacles, 91
orthopedics, 441
orthotics, 414
osteoarthritis, 176, 414
osteoporosis, 480
ovariectomy, 480
overground, 434

palpation, 280
parametric analysis, 204
Parkinson's disease, 182
passive extension, 634
passive, 54
patellar tracking, 616
patellofemoral contact, 616
patellofemoral joint, 308, 616
pattern recognition and classification, 216
pelvic stability, 293
pelvis, 293, 371
pennation, 256
plantar pressure, 420
positioning device, 308
post estimation, 455
posture, 18, 495, 584
preferred effort, 27
prosthesis work, 83

quadriceps exercise, 153
quadriceps strength, 314

range of motion, 365
rat femur, 480
real-time mode, 308
redundancy, 121
reference data, 204
rehabilitation, 138, 153
reliability, 374
repeatability, 204
reproducibility, 308, I
resection, 608
robotics, 250, 492
root-mean-square, 344
running, 515, 521

sacroiliac joint, 293
sacroiliac ligament, 293
scapulo-humeral rhythm, 593
scoliosis, 548
second metacarpal, 485
shear, 561
shock waves, 515
shoulder moments, 272
shoulder, 54, 280, 377, 593
simulation, 521
six DOF electromagnetic tracking device, 280
skeletal muscle model, 256
spatial and temporal patterns, 300
spinal loading, 141, 561
spine, 112
squatting exercises, 403
stability, 54, 300, 603
start-up friction, 492
static, 54
stiffness, 441
strain gauge, 608
strain, 163
stress shielding, 608
sub-failure, 48
subtalar, 62

talonavicular, 62
three-dimensional kinematics, 574
three-dimensional motion, 452
tibia, 473, 603
torque, 336
total knee arthroplasty, 176
total knee replacements, 455
trabecular bone, 351
transverse ligament, 112
trauma, 239
treadmill, 434
triceps surae muscle, 634
triceps surae, 532
tridimensional analysis, 36
trunk kinematics, 561

ultrasound transmission velocity, 480
ultrasound, 1, 374
unit function, 351

validation, 36
variations, 128
varus knee, 414
VDT, 584

walking, 77, 83, 434
weight lifting, 121
weightbearing, 374
wheelchair propulsion, 234
whiplash, 239
windlass mechanism, 190
wire tension, 449
work, 77, 336
work-related musculoskeletal disorders, 261
wrist-joint, 128
wrist splints, 234

X-ray video, 593

PII: S0268-0033(98)00081-3